Environmental Science (LS)

ENVS - 1400 001

Course Description

Introductory Earth and Environmental Science course on human interactions with the environment. Biological concepts are taught in the context of how environmental changes impact life. Conservation and management of Earth's spheres including biogeochemical cycles, ecology, sustainable resource management, water and air pollution, and climate change are surveyed. It is recommended that students take ENVS 1405 in the same semester as this course.

Prerequisite(s): ENGL 0900 w/C grade or better, or appropriate placement score.
Semester(s): Fall & Spring

Course Student Learning Outcomes

- Describe the components of the biosphere and the attributes that living organisms share.
- Analyze the impact of anthropogenic disturbances on key cellular processes including how pollutants can affect cellular reproduction and the role of metabolism in energy flow and biogeochemical cycles within Earth’s Spheres.
- Outline the influence of climate and mutations on the evolution of populations.
- Assess the impact of activities associated with an ever-increasing human population on our environment including mining, pollution, waste management, climate change, and biodiversity loss.
- Engage in mutually beneficial civic activities that promote a sustainable society and enhance their understanding of issues important to local, national, and global communities.

- Demonstrate an ability to find, assess, cite, and utilize credible scientific literature and data in a professional and ethical manner.

Course Schedule

Note - Days of week that course meets and holidays/special events may slightly alter this schedule.

Week/Module	Topics
1	Introduction/What is Environmental Science?
2	Biosphere - Communities and Ecology
3	Chemical Foundations
4	Geosphere
5	Hydrosphere
6	Atmosphere
7	Cellular Systems - Structure and Function
8	Cellular Change - Disturbance and Evolution
9	Energy Flow - Laws and Photosynthesis
10	Nutrient Cycling
11	Human Populations
12	Resources - Materials, Food, Energy
13	Waste and Pollution
14	Climate and Change
15	Conservation and Biodiversity
16	Sustainability

General Education Information

LS

This course fulfills the above requirement for the General Education Program at Salt Lake Community College. It is designed not only to teach the information and skills required by the discipline, but also to develop vital workplace skills and to teach strategies and skills that can be used for life-long learning.

General Education courses teach basic skills as well as broaden a student's knowledge of a wide range of subjects. Education is much more than the acquisition of facts; it is being able to use information in meaningful ways in order to enrich one's life.

While the subject of each course is important and useful, we become truly educated through making connections of such varied information with the different methods of organizing human experience that are practiced by different disciplines. Therefore, this course, when combined with other General Education courses, will enable you to develop broader perspectives and deeper understandings of your community and the world, as well as challenge previously held assumptions about the world and its inhabitants.

Community-Engaged Learning (CEL)

This course carries a Community-Engaged Learning (CEL) designation. CEL courses are a part of the college's commitment to Civic engagement, and also fulfils one of two courses necessary for the Civically Engaged Scholars (CES) program.

Community-engaged learning (i.e., service-learning) is a course in which students participate in mutually identified service activities that benefit the community, and reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of personal values and civic responsibility.

Community-Engaged Learning (CEL) provides a crucial opportunity for students in environmental science to actively apply their classroom knowledge to real-world challenges. This experiential approach, offers a powerful antidote to the potential for despair that can arise from studying issues like climate change, environmental degradation, and biodiversity loss. By participating in tangible projects, such as habitat restoration, citizen science initiatives, or community-based conservation efforts, students can shift their perspective from one of passive observation of negative trends to one of active problem-solving and positive impact. This hands-on work not only reinforces academic concepts but also fosters a sense of agency and hope, allowing students to see themselves as agents of change rather than just spectators of environmental decline. The required community service (15 hours over the course of the semester), therefore, transforms the educational experience from one that solely focuses on problems to one that empowers students to be a part of the solution.

In this course, we will blend our CEL service with the General Education project, for a comprehensive academic and community based project that reflects on environmental service and environmental research.

Academic Integrity

Academic Dishonesty is absolutely NOT tolerated & includes all forms of cheating and plagiarism as outlined in the Code of Student Rights and Responsibilities and outlined here. There is NO tolerance for dishonesty. Academic dishonesty includes but is not limited to claiming another person's work or words as one's own, accessing answers to lab reports, quizzes, and exams from the Internet, completing quizzes or exams with other individuals. Students must write all answers in their own words. Copying and pasting from any other sources is unacceptable.

Generative artificial intelligence (AI) software is a rapidly emerging tool that students may be interested in using. If doing so, SLCC students are expected to adhere to the same standards as the Code of Student Rights and Responsibilities statement on plagiarism. Presenting generative AI software content as your own is a violation of academic integrity. If you use generative AI in your work, you must indicate that you have done so. AI is generally not acceptable to use in this course, and is never permitted on quizzes or exams. There may be certain contexts in the project where AI could be applicable, but you must discuss with instructor first!

Exams are to be completed individually by the student. Exams and Quizzes may require Respondus Lockdown Browser.

Penalty for first offense will result in grade of "0" on the assignment or exam & second offense may result in an "E" for the course and will be reported to the Dean of Students.

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements.

By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the Institutional Syllabus page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the Institutional Syllabus page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the Institutional Syllabus page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar

Additional Policies

Attendance:

Attendance and participation within the first week is mandatory or you risk an administrative drop for non-attendance. Students are expected to attend each session within reason. Your presence in the classroom is valuable to me! Attendance is important for your learning, effective two-way communication, and community in our class. I want you to be here! If you are sick, stay home as you feel is appropriate. If you have an emergency, make the best choice as necessary. You will be responsible for missed work. Repeated absences may impact your credit in the Attendance and Participation category.

Due Dates and Late Work Policy:

Late Work: It is your responsibility to plan ahead and allocate enough time to complete the assignments. Late work will be penalized at **5% per day**, up to **TEN days** after original deadline. No late assignments will be accepted if they are more than **Ten days late** or past the end of the semester**.** Contact your instructor if you have extenuating circumstances.

Electronic Devices:

Cell Phones are to be turned off during class. Computers can be used for notetaking and course-related purposes ONLY but should not be used during class for working on other tasks (e.g., answer emails, Facebook, other classes etc.). You will be asked to leave if your electronic device disrupts the class in anyway. Cell phones MUST be turned completely OFF during exams.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Chemical Foundations Q&A	Discussion	0
	Course Discussion Board	Discussion	0
	DNA Structure and Function Q&A	Discussion	0

Due Date	Assignment Name	Assignment Type	Points
	Introduce Yourself	Discussion	5
	Research Skills: Case Study	Quiz	0
	The Cell Q&A	Discussion	0
8/31/25	Orientation Quiz	Quiz	5